No. 3108.

IN THE

## UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE NINTH CIRCUIT

GEORGE J. HENRY, JR.,

Appellant,

VS.

CITY OF LOS ANGELES,

Appellee.

## APPELLANT'S REPLY BRIEF

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Filed this ——————day of July, 1918

FRANK D. MONCKTON, Clerk

By Deputy Clerk.



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We find we have so thoroughly, in our opening brief, anticipated the discussion of the points indulged in by Appellee, that, to avoid repetition, there remains little to be done other than to recall to Your Honors' attention certain pertinent portions of our opening brief, together with short further references to the record and the law. However, lest the court be deceived and led astray, we feel it our duty to further direct attention, perhaps at some length, to certain specific instances in which counsel for Appellee has clearly and flagrantly departed from the law and the facts. Throughout Appellee's entire brief there is the clear intention to cloud the big, broad issues of

this case by distorting and magnifying the unessential and immaterial details, all of which can in no way affect a proper determination of this appeal.

#### LYNDON'S CONTRIBUTION TO THE ART.

Prior to the advent of the Lyndon invention, the record shows that there was a diligent search made for the device which invented. Defendant's expert Cobb was diligently searching and his clients needed such a governor. (R. 674, Q. 126, 600; Q. 14; also pages 600-731-674-675. See also Scattergood, page 534.) See also in this connection the testimony of Prof. Cory of the University of California, R. 250 to 260; also 264-265-266. See especially R. 468. He testified that the Lyndon invention was used by the Doble Water Wheel Company and by the Pelton Water Wheel Company and others. R. 262. The Lyndon invention is adaptable to the varying requirements of the different water wheel plants with which it may be employed. R. 522, 523, 466, 285, 276. See also the testimony of Lyndon, the inventor, R. 1948 to 1954. This shows the practical adaption and operation of the invention by the inventor.

The matter of Lyndon's contribution to the art is also covered in our opening brief, pages 1 to 8 inclusive, and also page 31.

#### VALIDITY AND SCOPE.

This is covered in our opening brief, pages 47 to 51, and on pages 9 to 19. Particular attention is di-

rected to the table facing page 48. We contend that Lyndon was the inventor of the new and useful combinations of parts which separately may have been old in the art, including connective means for certain of the main elements. We contend that even if the French and Swiss patents were properly proven in the case, they cannot avail defendant as anticipation, because plaintiff has thoroughly established and proven the incipiency of the Lyndon invention, carrying the date of that invention back to a time prior to the alleged publications of these patents. opening brief pages 49 to 50.) This is done by proofs of the strongest character and beyond a reasonable doubt, and follows the established rule that while an anticipation must be a completed thing, publicly known and publicly used, the incipiency of an invention may be proven by matters less than public action or public use, such as, for example, an oral or written description or sketch.

The rule asserted by Appellee as laid in Automatic v. Pneumatic, 166 Fed. 288, is not the rule that applies in proving incipiency. The distinction clearly appears in Walker, Section 70, quoted below. It is rather the rule that applies to competing inventors, each of whom is seeking a patent for, or asserting the right to, the same invention. Under such circumstances, the diligent party who first reduced to practice will prevail.

Under all the authorities, and within every conceivable requirement of the law, appellant has carried back the date of the invention of Lyndon by oral description and disclosure to others, by sketch dis-

closed to others, by written description disclosed to others, and by caveat consisting of written description and drawings, filed in the United States Patent Office, all prior to the date of publication of the French and Swiss patents. Walker on patents, 5th edition, Sec. 70, page 86, states this law as follows:

"In order to apply the rule of the last section, it is necessary to fix the date of the invention covered by the patent sought to be anticipated. In cases where the invention may be exhibited in a drawing or in a model, it will date from the completion of such a model or such a drawing as is sufficiently plain to enable those skilled in the art to understand the invention;

Loom Co. v. Higgins, 105 U. S. 594, 1881;

Deering v. Harvester Works, 155 U. S. 298, 1894;

Heath v. Hildreth, 1 McArthur's Patent Cases, 24, 1841;

Perry v. Cornell, 1 McArthur's Patent Cases, 78, 1847;

Farley v. Steam Gauge Co., 1 McArthur's Patent Cases, 621, 1859;

Hubel v. Dick, 28 F. R. 139, 1886;

Von Schmidt v. Bowers, 80 F. R. 140, 1897;

Moline Plow Co. v. Rock Island Plow Co., 212 F. R. 727, 1914.

and patented inventions always date at least as early as the dates of the execution of the original appli-

cations therefor, provided the original applications exhibit the inventions with the above-mentioned extent of sufficiency.

Kearney v. Railroad Co., 32 F. R. 322, 1887;National Machine Co. v. Brown, 36 F. R. 321, 1888.

In cases where a patented invention was explained in words, without the aid of any model or any drawing, it will date from the completion of such a written description as would teach others how to make and use the invention described. In cases where the inventor makes a specimen of the thing invented, before he makes any model, or drawing, or written description to represent that thing, the invention will date from the completion of that specimen. Perfection is not necessary to such a specimen in order to entitle it to such an effect. Substantial completeness is enough.

National Cash Register Co. v. Store Service Co., 60 F. R. 603, 1894;

Coffee v. Guerrant, 68 O. G. 279, 1894.

And where the distinguishing characteristic of an invention, consists of a composition of matter capable of considerable variations in its ingredient, the invention will date from the time when the first of those variations was reduced to successful practice.

American Sulphite Pulp Co. v. Howland Falls Pulp Co., 80 F. R. 401, 1897. No invention ought to date from any day wherein it had no existence or representation outside of the mind of the inventor, no matter how clear or how complete his mental conception of its character and mode of operation may have been. Mental conceptions are not useful inventions until they are so embodied that the world could use them after the deaths of the persons who conceived them.

Clark Thread Co. v. Willimantic Linen Co., 140 U. S. 489, 1891;

Voightman v. Perkinson, 138 F. R. 56, 1905; Killeen v. Buffalo Furnace Co., 140 F. R. 33, 1905;

Corrington v. Westinghouse Air Brake Co., 178 F. R. 711, 1910.

To allow inventions to take date from mental conceptions, would strongly tempt inventors to commit perjury in order to appear to anticipate real anticipations of their patents.

Whether an oral description given by the inventor to another, of a subsequently patented invention, can give that invention a date earlier than that to which it would otherwise be entitled, depends upon the nature of the invention and the capacity of the hearer to understand it and remember it. Where an invention is abtruse or is complicated, and where it is not certain that the hearer understood it and has remembered it well enough to communicate it to the world in case of the inventor's death, the invention ought not to date from such a description.

Stephens v. Salisbury, 1 McArthur's Patent Cases, 385, 1855;

But where it is shown that the person to whom such an oral description was given understood it completely, and has remembered it accurately, a patented invention may date back to that oral description.

- Philadelphia & Trenton R. R. v. Stimpson, 14 Peters, 448, 1840;
- Stephens v. Salisbury, 1 McArthur's Patent Cases, 385, 1855;
- Hill v. Dunklee, 1 McArthur's Patent Cases, 483, 1857;
- Davidson v. Lewis, 1 McArthur's Patent Cases, 599, 1858;
- McCormack Machine Co. v. Harvester Works, 42 F. R. 153, 1890;
- Merrow v. Shoemaker, 59 F. R. 122, 1893;
- Westinghouse Electric & Mfg. Co. v. Roberts, 125 F. R. 6, 1903.

In such cases it is not necessary that all the mechanical details shall be expressed in the disclosure or even have been thought out.

Westinghouse Electric & Mfg. Co. v. Stanley Inst. Co., 133 F. R. 167, 1904.

The reason for allowing a patented invention to date back to an oral or a written description, or to a drawing or a model, as the case may be, while an unpatented invention, which is set up to negative the novelty of a patented invention, is not allowed to date back to either of those things, resides in the fact that those things are incipient in their nature, and in the principle that an invention which is ultimately do veloped and given to the world in a patent, ought equitably to date from such an incipiency, while the rights of a patentee ought not to be impaired by a similar incipiency which was never developed into a patent.

Bowers v. Von Schmidt, 63 F. R. 577, 1894.

When a patent is questioned in point of novelty. and when that question depends upon the date of the invention claimed in that patent, it is not material whether the event, which constituted that invention, occurred in the United States or in some other country.

Hanifen v. E. H. Godshalk Co., 78 F. R. 811, 1896;

Hanifen v. Price, 96 F. R. 441, 1899;

Welsbach Light Co. v. American Incandescent Lamp Co., 98 F. R. 616, 1899;

Badische Anilin & Soda Fabrik v. Klipstein & Co., 125 F. R. 543, 1903.

For a very complete discussion of the whole subject of priority of date of invention as between two inventors, see the opinion of Judge Colt in Automatic Weighing Machine Co. v. Pneumatic Scale Corporation.

Automatic Weighing Machine Co. v. Pneumatic Scale Corporation, 166 F. R. 1909;

McCreery Engineering Co. v. Mass. Fan Co.. 195 F. R. 498, 1912.

Attention is called to the fact that the law, as above stated, applies particularly to the proofs in this case, in that the witnesses Meyer, Reid, the younger Lyndon and others, were skilled and technical men thoroughly capable of understanding the disclosures made to them verbally and with sketches by the inventor, Lyndon, and it is plain from their testimony that they fully understood such disclosures. The invention was not, to them, abstruse or complicated. It is only the specific details of the mechanism which at all run into complication, and as to these the law, we see, makes it clear that it is not necessary for the same to be expressed in the disclosure or even to have been thought out.

The inventive thought and conception, and in fact every stage of the inventive act, except actual use or application for patent, had been completed by Lyndon, as the record fully demonstrates, long prior to the alleged publications of the Swiss and French patents.

Appellee contends that if narrowly construed to avoid the French and Swiss patents, Lyndon will be anticipated as to claims 6 and 7 by the Bakersfield device. This is a direct misstatement of facts. There is no testimony to indicate that there was any return of the so-called bypass valve at Bakers-

field, at any time after governor action and the testimony is very strong to the contrary. Lyndon's claim 7 is drawn specifically to an independent movement of the bypass valve after governing action. Counsel gives the direct lie to his own statement, that claim 7 is anticipated by Bakersfield, when he says on page 112 of his brief, commencing line 9 from the bottom: "The bypass valve and the main gates of this Bakersfield device were connected solidly together so as to work synchronously, the operation closely resembling that of the defendant."

(Throughout this brief, the italics used are generally ours.)

Defendant's witness Berry admits (R. 1307 to 1309, QQ. 854 to 863) that defendant's exhibits XX and Journal of Electricity, Vol. 6, disclose inoperativeness of the Bakersfield installation, as therein shown. Berry was admittedly an incompetent witness to testify in any respect as to any attempted operation of the Bakersfield experiment. He admits he had no knowledge of it personally, that is, of anything that occurred at that plant, after the tests of the Girard water wheels, which were the first wheels installed at that plant. (R. 1190.) Defendant's witness Cobb rendered his report on these tests under date of August 24, 1897. This report admits the failure of the alleged bypass and its associated parts. (R. 751 to 756.) Cobb likewise admits that he was not present at the installations or tests of any water wheels at this plant

after the date of his August, 1897, report. (R. 602.) The part of this report, containing the matter admitting the insufficiency and failure of the alleged bypass device at that plant, was sealed up when defendant offered such report in evidence, and was only opened to inspection after complainant had so demanded. This part of the report, which defendant or Cobb tried to suppress and conceal, absolutely refutes the testimony given by Cobb that the bypass device was useful. (R. 603 to 606.)

All of counsel's contentions are specifically met in our opening brief, pages 29 to 32 inclusive, as regards this Bakersfield device; and the type of valve which was put in at Bakersfield as a bypass attempt was an entirely different type of valve from that employed by Lyndon and intended to operate upon a different principle. It is known as the Friction type of valve, whereas the Lyndon valve was a Frictionless valve; and it is a vital element which precluded successful operation on the part of the Bakersfield installation. No governor could sensitively operate, as is necessary in electro-mechanical practice, with such a type of valve as used in the Bakersfield installation. The friction would absolutely annihilate any sensitiveness, acting as a brake and preventing the operation of the governor. The effort to use the friction type of valve at Bakersfield by Cobb, Van Emon and Berry, whether they are individually or collectively responsible, is clear evidence that they missed the fundamental requirements of successful governing,

and the evidence is replete that the Bakersfield device was scrapped and sold for junk because it was unsuccessful—it would not govern. Cobb subsequently installed water wheel plants; Berry subsequently installed water wheel plants. Neither one ever built another governor like that which they attempted to put on at the Bakersfield plant, nor such a bypass valve. Cobb used his patent pressure regulator and Berry used other forms of governing in all of their subsequent installations. The entire system of governing was changed at the Bakersfield plant. See the testimony of Prof. Cory, R. 2300 to 2303, that the Lyndon Butterfly valve was different and worked and did accomplish what Lyndon claimed for it, as distinguished from the Bakersfield type of valve. The plug cock type of valve adopted at Bakersfield would act as a brake not only to interfere with, but to prevent, successful operation (see pages 2304 to 2308).

After Lyndon taught the use of the frictionless type of valve to secure proper governing relations, Cobb very clearly distinguishes between the Bakersfield friction type and the non-friction type of the Lyndon combination. (R. 789-790.) As we have seen in our opening brief, pages 34 and 35, this frictionless type of valve may properly be read into claims 6, 7 and 8. While there is no evidence that the exact specific thing of the Lyndon patent drawings has ever been put into actual use, it is to be remembered that claims 3, 4, 6, 7 and 8 are not limited to any such exact thing at all, and, therefore, it is not fair to say that the invention has not

shows, has been extensively used and it does not lie in the mouth of this defendant, one such user, to urge a narrow interpretation of claims which it has pirated for any such reason. In equity and patent law its very practice of such broad invention estops it from any such technical defense. We know of no authority supporting defendant in such a defense under the circumstances recited. It might have attempted to use the Bakersfield failure, the Grass Valley experiment, the French and Swiss attempts and the English and Wetmore and Lamb dead issues. But, like most accused infringers, while praising the prior art, defendant uses plaintiff's invention.

The cases in which narrow patents were not permitted to dominate the art concerned because their specifically claimed inventions had not been used, do not stand in point with the present situation which involves a foundation or pioneer patent. We have the authority of the Supreme Court in the Paper Bag case (210 U. S. 405) for our contention that a patent and its invention may be long pigeonholed before suit under such patent, and yet the patent may be broadly interpreted and found infringed, as occurred in that case.

Again, a great deal is said by appellee to the effect that the patent in suit should be narrowly interpreted because the device of the drawings is not a fully perfected and entirely commercially refined apparatus. It suffices to briefly remind ourselves that the specific device of the Bell Telephone pat-

ent, the specific devices of the Edison Phonograph patent, the specific device of the Wright Brothers Flying Machine patent, and so on throughout the brilliant list of patents for big underlying inventions, were all crudities which would not be used by anyone today; and which but feebly, and in a bungling way, and with many defects, served as crude embodiments of the broad inventions concerned. In the Wright Flying Machine patent some of the broadest claims were limited to a flat plane which represented absolutely imperfect practice, and which nobody has used since the early days of the experimental flights. Counsel for appellant happened to be of counsel for defendants in the first suit under the Wright patent, and is fully conversant with the facts and circumstances involving both plaintiff's and defendants' structures. (See The Wright Company v. Herring-Curtiss Company, et al., below.) And while we have that decision before us, we wish to point out another grievous error into which appellee's counsel has fallen in this case, namely, his argument to this Court, that because appellee has perhaps not fully utilized each and every attribute and quality and function of the Lyndon invention, the question of infringement is in doubt. On one side of this question, namely, the use or non use of every advantage of the invention, our opening brief contains conclusive authority, pages 58 and 59. On the other side of the question, namely, that which concerns the performance by the defendant's machine of all the

functions of the invention of Lyndon at all times, we wish to call to Your Honor's attention the wellestablished doctrine of potential infringement, that is, infringement in and by the construction of defendant being adapted to infringe or so organized as to be capable of infringement, by adjustment, or actually to infringe under certain conditions and at certain times. A leading case on this doctrine is that of King Ax Co. v. Hubbard, below, together with the above cited case of The Wright Company v. Herring-Curtiss Company, et al. In the latter case the Court held that although defendants' rudder was not at all times used when balancing of the machine transversely took place, this combination of rudder and balancing means claimed by plaintiffs was nevertheless present in defendants' machines and was in fact at times used, although there was no physical connection in an operative sense between the rudder and the balancing devices. In fact, only by human intervention was the combination completed and its function performed. In the Weed Chain Tire Grip cases, below, this same question of a function suppressed, disguised or dormant at times was squarely raised on the issue of infringement and infringement was found in view of the potentialities present. Your Honors have passed upon this same question recently as to the structural camouflage introduced by dependant, in Union Tool Company v. Wilson, 249 Fed. 736, Advance Sheets Federal Reporter of July 18, 1918.

The same counsel represented the defendant in

said case and made the same unsound argument on this question of law as he makes here.

Walker on Patents, Fifth Edition, Section 368a, page 456, has the following on this question of potential infringement, suppressed function, or the non-use of invention at most times, although adaptation for such use, and such occasional use, be present:

"Structures which are designed merely for the purpose of evading the spirit of the invention but which contain all the elements of the claims, are infringements of the patent. For example, infringement may not be evaded by adding to the structure of the patent an easily discarded part which may or may not be used by the purchaser, although if used the structure would not be within the scope of the patent.

Weed Chain Tire Grip Co. v. Cleveland Chain & Mfg. Co., 196 F. R. 213, 1910;

Parsons Non-Skid Co. v. Atlas Chain Co., 198 F. R. 399, 1912;

Parsons Non-Skid Co. v. Asch, 196 F. R. 215, 1912.

Likewise the charge of infringement is not averted by a showing that the structure may be and occasionally is used in good faith in a manner that will not infringe if it would infringe when used in the normal, easiest and most effective way.

Marconi Wireless Telegraph Co. v. DeForest Telephone and Telegraph Co., 225 Fed. R. 65, 1914;

Parsons Non-Skid Co. v. Atlas Chain Co., 198 F. R. 399, 1912."

On this same question of suppressed function, ex-President Taft, then Circuit Judge, has the following to say, in King Ax Co. et al. v. Hubbard 97 Fed. R. 795, a decision of the Circuit Court of Appeals for the Sixth Circuit, reading from page 803:

"This is an instance, not infrequent in patent litigation, where the infringer has sought to evade the claims of a patent, the substance of which he is appropriating, by deliberately impairing the function of one element, without destroying the substantial identity of structure, operation and result. Sewall v. Jones, 91 U.S. 171; Coupe v. Weatherhead, 16 Fed. 673; Machine Co. v. Binney, 24 Fed. Cas. 653. This court, following the Supreme Court, has pointed out in a number of cases that the more meritorious the patent, the more liberal will the court be in applying the doctrine of equivalents to cover devices adopted for the purpose of appropriating all that is good in a patent without rendering the tribute which the patent law was intended to secure, for a temporary period, to those who by their ingenuity have made possible real progress in the industrial arts. Bundy Mfg. Co. v. Detroit Time Register Co., 94 Fed. 524; McCormick Harvesting Machine Co. v. Aultman, Miller & Co., 37 U. S. App. 299, 16 C. C. A. 259, and 69 Fed. 371; Wells v. Curtis, 31 U. S. App. 123, 13 C. C. A. 494, and 66 Fed. 318; Miller v. Manufacturing Co, 151 U. S. 186, 207, 14 Sup. Ct. 310."

Equally unsound is counsel's argument that the Lyndon invention has as its life-giving principle or identifying characteristic the normal positioning or the usual positioning of the bypass valve in a halfopen position. The same counsel made the same sort of restrictive and limiting argument for defendant in Parker v. Automatic Machine Company, 227 Fed. R. 449 and His Honor, Judge Van Fleet, in his opinion (page 452) went to considerable length to show the folly of such abortive, revolutionary and unsound reasoning, which would single out some specific item of the description and drawing of the patent and have it that the combination as an entirety, in all its breadth and importance, be tied down, hampered, restricted and emasculated by any such mere detail concerning the one particular form shown.

### Quoting from Judge Van Fleet's said decision:

"Defendant's contention is, in fact, that the so-called 'elevator' feature of plaintiff's device is its 'life-giving principle,' and it is so essential to the successful operation of the entire combination of correlated parts that without it the machine is not workable, and that consequently 'there can be no infringement of the Parker patent by any machine which does not employ the same principle of action, to wit, the elevator principle.' In this I am unable to accept defendant's view, but am satisfied that he greatly magnifies the functional value of that element in its relation to the other features of the combination. As I regard it, this feature of the feed mechanism of plaintiff's device is in no wise essential to its life; nor do the terms of the patent make it so. Any other means of an equivalent nature may be substituted for it and still be within the patent: and from my observation of the operation of the two machines, in the light of the evidence, I am

quite satisfied that the substitute means employed in defendant's device is no more than such a change as might readily have been suggested to the mind of any mechanic skilled in the art, with plaintiff's device before him, and that it in no material way effects a change in the principle or mode of operation found in plaintiff's combination."

While it is not a matter of record, we believe that counsel for appellee cannot fairly object to our recording in this brief, certain of his acts and his attitude, concerning appellant in this case, prior to the retainer of said counsel by the appellee on this appeal. Counsel for appellee took a fee from appellant for consultation concerning the patent in suit, and during the argument of this case before the lower Court, espoused plaintiff's cause and went to the extent of offering his advice and suggestions to plaintiff, in a certain conference in the office of counsel for appellant, and in his presence and in the presence of appellant, which lasted for over an hour, and in the course of that conference counsel for appellee volunteered to draft a definition of a combination claim which would fit the facts and circumstances and conditions of the present suit and applying the claims therein to defendant's structures. This definition was written out in Mr. Lyon's own handwriting, was preserved by appellant, and is copied in heavy faced type verbatim on page 21 of our opening brief.

We do not know why Mr. Lyon forced these gratuities upon appellant, or what were his ulti-

mate motives, but we adopted counsel's said combination-claim-definition; we believe it a good one and we are at a loss to understand how counsel, if he were then sincere and acting in good faith and reflecting patent law as he did believe it, could now take such a diametrically opposed view of the proper interpretation of the broad claims of the patent in suit. If he then thought that the connective means, as for instance the means for inversely operating the water gate and bypass valve of claims 6, 7 and 8, could properly be represented in defendant's structure by "any substitute which can perform the same office or duty," it is hard for us to believe that he doesn't believe so now.

### STRIKING ERRORS, MISREPRESENTATIONS, UNTRUTHS AND DISTORTIONS IN APPELLEE'S BRIEF.

Where do the "proofs conclusively show" that appellant bought the patent in suit as a speculation? (See page 14.)

On page 15 counsel distorts the record at (R. 2076, Q. 483). The testimony is, as to present day commercial manufacture, and says nothing about use.

On page 16, counsel refers to what he calls Lyndon's mere dream. If he means Lyndon's inventive inspiration, all we can say is that the record shows that the world is enjoying the fruits of it. For counsel boldly to assert that the Lyndon "device" is inoperative, flies in the face of the testimony of his

own witnesses, as well as appellant's and is a desperate attempt to destroy the Lyndon grant in the face of a record overwhelmingly proving the practicability and indispensability of the novel and broad Lyndon combinations, in governing electro-mechanical water wheels.

It is shown in the deposition of Lyndon that his invention as included in claims 3 and 4 was embodied in the water wheel governors installed by him in Austin, Texas (R. 1947, Q. 233, to R. 1954; R. 1819-2075, Q. 481; R. 2085, Q. 499). Counsel suppresses and, in fact, disputes this evidence in the middle of page 20 of his brief. Lyndon testifies (R. 2077, Q. 485) that he knew of no governor made at the present time which does not have a returning device to prevent the governor from overrunning.

By the very weight of the record counsel is forced to admit at the bottom of page 20 and top of page 21 that the various parts including electrical devices by which water wheel gate, bypass valve, returning device, etc., are set into motion, are reasonably to be accepted as operative. In this he agrees with the consensus of opinion and preponderance of the testimony of all the experts in this case, and his only concern is lest some obscure and hypothetical internal trouble arise which will militate against the action of the governor to produce the results set forth in the patent.

Counsel then proceeds to indulge in a spasm of apprehension lest something go awry in some department of the mechanism shown in the Lyndon patent drawings, in spite of the admission he has

made that these various parts will perform in the manner set forth. He fears that something would go wrong with the controller and particularly with the clutch discs 22 and 23 and the rod 25 and link 25a, so that governing might be interrupted before it got well under way. The testimony shows that these clutch discs are designed to slip. Professor Durand admits that. (R. 2835.) This being so, the action of the returning device, by progressive engagements and slips of these clutch members continues until the energy in the solenoid 33 is so reduced because of the progressive accomplishment of the governing action, that the returning device terminates the governing action before the governor has overrun.

Professor Durand says in his answer (X-Q. 109, R. 2829) that the Lyndon device "is operative entirely independent of human intervention, \* \* \* ."

Counsel wilfully distorts the record and the patent itself when he would make it appear that the returning device is limited to the rod 25 alone. He does this on page 85 of his brief by quoting only from one part of the patent. Want of fairness and frankness on his part would conceal from Your Honors the complete facts recited fully on page three of the patent in suit, lines 116 et seq., to-wit:

"The rod 25, discs 22 and 23, and the controlling clutch-magnet 32, constitute a returning device for preventing the governor from over-running—that is, moving the water-wheel gate a greater distance than is actually necessary for proper regulations, \* \* \* \*" This is but a specimen of counsel's attempts to obstruct the path through this court of a meritorious and giant invention by strewing in its way the mere dust of misrepresentation and quibble over division and sub-division of details of the main groups of features constituting elements of the broad claims of the patent. Whether this or that portion of the Lyndon patent disclosure or defendant's devices comes entirely within one group of elements, or bridges that group over into another group, is entirely immaterial, and it is not to be wondered at that frank and independent witnesses of the standing and character of appellant and Prof. Cory should disagree as to the exact territory in the structure blanketed by the broad terms of the broad claims of the patent.

We find another stretching of the truth by counsel at the bottom of page 32 and top of page 33. It is found that Henry testified consistently, namely that contracts were made and broken under certain conditions at substantially the same time, and subsequently testified that these things might take place in sequence under certain adjusted conditions. It all shows how well Lyndon provided for variations in the relations of his detail parts so that a flexibility of adaptation of the governor was provided. The suggestion of sequence of energization is clearly indicated in the words "if properly adjusted" lines 77-78, page 4 of the patent. Counsel's contention that re-invention is necessary to permit a movement of the main gate without a movement of the bypass valve is ridiculous, in view of the number of ways and the ease with which the adjustments referred to by Lyndon may be readily accomplished.

At the bottom of page 33 counsel certainly flies in the face of a strong record to the contrary when he says, "Complainant's only answer to defendant's contention that the Lyndon device is inoperative is the production of a model which ignores the question completely, because," Counsel then attempts to prove the model inoperative and thereby the Lyndon invention inoperative, although he says that the model shows absolutely nothing "that defendant has not tacitly admitted." (Page 34.) We have seen that counsel has admitted that the parts of the Lyndon device pictured in the drawings of the patent are operative among themselves. And we find that counsel's own expert witness, Prof. Durand of Stanford University, fully agrees with appellant at R. 2803, 2804, A. 45; 2805 and 2808, in his description of the Lyndon model and its operation (as see R. 2496 to 2503) excepting that he disagrees with or cannot adopt appellant's conclusions in some respects because the Lyndon model is not connected up with a complete hydraulic power plant, which means penstock, water supply from the mountains, spillway, transmission line, commercial load with all its different factors, switchboard and so forth, none of which are part of the governor which is the subject of the patent in suit. Prof. Durand's attitude on this is clearly shown at R. 2857 and 2858. We must indeed apologize for not being able to set up in a courtroom all of these elements of power consuming machinery, rapidly flowing torrents of water, long transmission lines, dangerous switchboards, and all the other paraphernalia of an electro-mechanical power plant such

as found on the Pacific watershed. On the practical side is the fact that the Lyndon invention is, and for ten years has been, operatively employed in performing in accordance with the teachings of the broad Lyndon invention and in doing just what the Honorable Trial Judge admits in his opinion, namely, "actually producing the useful result claimed for the Lyndon patent." (R. 68.)

Counsel (page 35) attempts to make it appear that there are different modes of operation in the Lyndon invention and defendant's devices. At no place in appellee's brief is there pointed out, nor can there be pointed out, any distinction between the operation of inversely moving the water-gate and bypass valve in the patent and in defendant's device, nor between returning the bypass valve to normal position after use in the patent or in defendant's structure, nor in the action of a returning device as such in both cases to prevent the governor overrunning. These things occur in both instances, upon the same principle and pursuant to the same general mode of operation. It matters not that certain well known parts are employed in one instance in substitution for other certain well known parts in the other instance, and that these different devices execute somewhat different individual movements in certain cases. If these differences are sufficient to draw a line between the big accomplishment of Lyndon and the studied imitation of defendant, there can be no such thing as piracy in patent litigation. This same erroneous view of the law was entertained by counsel in Union Tool Company v. Wilson, 249 F. 736, supra.

Counsel's failure to distinguish between the breadth of a claim having an element for "means" and the narrowness of a claim for specific parts claimed specifically in combination, led him into grievous error in the long litigation decided by Your Honors in Wilson and Willard Manufacturing Company v. Union Tool Company, 249 F. 729, Advance Sheets Federal Reporter of July 18, 1918.

Counsel baldly distorts the facts (middle page 37) when he calls the Lyndon governor an "electro-mechanical" governor. In no place in the patent is the governor so described. The governor is described in the title, which is a mere designation of the art to which the invention belongs, as an electro-mechanical water-wheel governor, or a governor to be used in the art of electro-mechanical water wheels, namely, a governor for water wheels for mechanically driving electrical generators.

The manner in which counsel indulges in vagaries and twists and turns of statement and fact are displayed on pages 126 and 127, where he would make it appear that Mr. Lyndon's invention was for an electro magnetic water wheel governor. Palpably this is an attempt to limit the invention, not to what the title really implies, but to the use of incidental electro-magnets which Lyndon happened to disclose as one means only of setting into operation the main elements of his device.

The governor is nowhere specified as an electro-

mechanical governor. Wherever the words "electro-mechanical" are used, they are used in combination with the water wheel and where the governor is specified separately from the water wheel, it is invariably spoken of as a governor; not an electromechanical governor. Counsel says that "it was necessary for Lyndon to so limit himself in view of the prior art." This is not true nor has he so limited himself; the claims do not read for an electromechanical water wheel governor. As a basis for the contention of counsel, the title should have read "Electro-mechanical governor for water wheels" and counsel is desirous of having Your Honors reconstruct the title of this invention in this manner. The title is no part of the claim, nor is it to limit the claim.

The claims are the scope and measure of the grant to Lyndon and it was and is Lyndon's intention that this governor find its most useful application in the field of electro-mechanical water wheels. The defendant in this case is employing the Lyndon invention in the electro-mechanical water wheel plants on its aqueduct. All of the other numerous water wheel plants mentioned in the testimony as employing the Lyndon governor, by the several experts called by both sides are plants correctly described as electro-mechanical water wheel plants. Constant speed is of the greatest importance in the mechanical operation of electrical generators by water wheels, hence the electro-mechanical water wheel art. See the testimony of defendant's expert witness Cobb (R. 705, A. 224).

Counsel (page 41) attempts to divert the court's attention from the clear and full purport of Section 4888, U. S. R. S. by making it appear that all Lyndon invented was a "part." Admittedly, Lyndon invented the "combination" or "combinations" of his claims, and his claims are not for "parts," but for broad agroupments of features co-ordinated, because of their general characteristics, to produce certain results in a certain characteristic manner. He did not invent "part" of a governor, but he invented "combinations" in governors for electro-mechanical water wheels.

Counsel attempts (pages 43 to 45) to apply the rules relating to contracts involving the kingdom or state, so as to create an adverse impression as to the liberality to be accorded to the patentee in the interpretation of this patent. Not only is the United States not a Kingdom, but the courts have repeatedly held that any doubt as to the position of the inventor in his relation to the public is to be resolved in his In our opening brief (page 60), we quote cases applicable to the present situation. He who has made an invention and paid for patent for it is entitled to every modicum of real right in the prem-In the United States, the people contract, through the Federal Government with themselves, not with an over-lord on principles of paternalism, and the grant is not prayed for at the feet of a king.

Even if the title given to the invention in the patent be supposed, by doing violence to construction, to relate in any manner to the specific forms shown in the drawings and any electrical features thereof, it

would not limit the broad claims to such electrical characteristics, any more than the claim for a car body would be limited to a trolley car so as to exclude a steam car, even if a trolley were shown in the drawing of the patent as conventional means for providing motive power for the car.

Counsel does violence (page 45) to the record in stating that Lyndon did not himself bring suit under his patent. The record shows (R. 2584) that Lyndon brought suit before the year 1908 against a large infringer through a New York attorney, now deceased. for infringement of his patent, but Lyndon did not have means to carry on the suit, and other reasons of policy required its discontinuation.

His Honor, Judge Trippet, has found (R. 68) that "the defendant's device has been highly successful from the time of its installation, and since then he has been actually producing the useful result claimed for the Lyndon patent." Lyndon states very clearly on page 4 of his specifications, line 49: "The object of this compensating device is to take care of the inertia effect of the column of water in the feed pipe." And on lines 60 to 65 he clearly shows his understanding of the effect of gravity upon the flow of the water in the pipe line.

It is, therefore, clear that the results to be obtained with the Lyndon governor are the taking care of the inertia effect of the column of water in the feed pipe. To successfully govern the plant we must move the water gate quickly; if the water gate be moved quickly, the inertia effect of the water column in the pipe would be damaging unless Lyndon's com-

pensation means were employed in combination with said gate movement. (See specification page 4, lines 88 to 98.) The result sought to be attained by Lyndon is, therefore, the regulation of the speed of the water wheel by controlling the water flow to the water wheel and, at the same time, taking care of the inertia effect in the water column or pipe line. Mr. Scattergood testifying (R. 163, A. 26) says that "the result" (of the operation of the bypass or auxiliary relief nozzle of the defendant) "is to prevent dangerous rise of pressure which might endanger the penstock line, \* \* \* \* .'' Defendant's witness Mc-Afee supports this same evidence (R. 1568, 1569). The results attained by the defendant's structure is not water economy (see McAfee R. 1591). sults attained in the defendant's structure and that of the Lyndon patent are the same, namely, that the bypass or auxiliary relief nozzle opens and permits the escape of water to "prevent" (not relieve) excess pressure to which the pipe line and water column would be subjected on any occasion where governing takes place. And this same identical condition exists, and result is attained, by the Lyndon structure. During the period of bypass or auxiliary nozzle opening, there is an excess flow, or waste, of water through the bypass in both defendant's structure and in Lyndon's; and after governing has been accomplished, the excess flow of water is reduced to a minimum, by the slow return of the bypass valve. The actual governing of the water wheel in both the Lyndon device and that of defendant is accomplished mainly by the main gate, and the inertia effects are

taken care of in the bypass. (See Lyndon's specifications, page 4, lines 96 to 99.)

We also wish to call Your Honors' particular attention to the recent decision in the United States Fire Escape Counterbalance Co. v. Jos. Halstead Co., Northern District of Illinois, opinion by District Judge Sanborn (246 Fed. R. page 947). The second Syllabus in that case is as follows:

"A patentee is not limited by a particular description of his device in the patent, where it is expressly stated to be the preferred form of construction."

We also quote the following matter, beginning at the bottom of page 949:

"It is plain that the purpose of the inventor is to increase the weight of one section after the other, so as to keep the device in either one of the two positions. He prefers the ball and cylinder form, but shows no purpose to disclaim any other form in which the invention may be embodied, because he expressly says that the one described is the preferred form. The law gives him the advantage, even if he does not claim it. Winans v. Denmead, 15 How. 330, 14 L. Ed. 717, approved in Western El. Co. v. La Rue, 139 U. S. 601, 11 Sup. Ct. 670, 35 L. Ed. 294; United States v. Societe Anonyme, 224 U.S. 309, 32 Sup. Ct. 479, 56 L. Ed. 778. This preferred form is not essential to the operation of the ladder, as shown by the defendant's form, Werner v. King, 96 U. S. 218, 24 L. Ed. 613. Unless it can be seen that the ball and cylinder form constitutes the very gist and fundamental theory of the invention, a claim for 'means comprising an adjustable counterbalance,' as in claim 2, is not too broad. State Bank of Chicago v. Hillman, 180 Fed. 732, 104 C. C. A. 98; Burroughs Adding Machine Co. v. Felt & Tarrant Mfg. Co., 243 Fed. 869, C. C. A."

This decision is closely in sympathy with the decision of His Honor, Judge Van Fleet, in 227 Fed., R. 449, *supra*. It is likewise in sympathy with the leading authority, the Paper Bag case, 210 U. S., with Ries v. Barth, 136 Fed., and with Davis Sewing Machine Co. v. New Departure Mfg. Co., 217 Fed., all discussed in our opening brief, particularly with respect to the proper interpretation of the word "means."

Clearly, there is a distinction between a claim for a machine provided with power transmission means, and a claim for a machine driven by 10 feet of shaft, having a 12 inch pulley and an 8 inch belt and mounted in journals each having two oil cups for lubrication.

Counsel for appellee would have it that no skill of the patent attorney and no breadth of accomplishment in invention by the patentee could create any recognized distinction in scope and breadth between claims such as 3, 4, 6, 7 and 8, of the patent in suit and claims 1, 2, 5, and 9 thereof. This is the same sort of error counsel made in Wilson & Willard Mfg. Co. v. Union Tool Co., 249 Fed. 729, supra.

On page 50, we find a direct misquotation from the authority cited, Wilke v. Ostrum, and one which alters the meaning of the authority. Counsel has substituted the word "this for the word "his" in the fifth line of the quoted matter, which makes it appear that the defendant's machine may be intended to be spoken of instead of the plaintiff's. Furthermore, the last two lines of the quoted matter should be revised to read as follows: "was covered by the machine described in his specification and claimed in his application." The change by counsel eliminates any reference to the application as filed. Was it for the purpose of distracting this Court's attention from the fact that Lyndon's broad claims were allowed substantially as presented in the original application?

The "extraordinary occasions," mentioned so frequently by counsel for appellee (page 51), in which the auxiliary nozzle is used as a safety valve, are the occasions when the governor moves the main gate with sufficient rapidity to otherwise cause an inertia effect requiring action of the bypass, or "safety valve," which is then actuated by the governing means, and as such, employs the Lyndon in-

The principle of operation of the Lyndon device is that: based upon the necessity of quickly moving the main gate to control the flow of water to and, therefore, the speed of the water wheel, it is necessary to discharge water which would otherwise come to the water wheel; through a separate or auxiliary bypass, and this bypass operates inversly to the operation of the main gate.

This is the primary principle upon which the Lyndon device operates and the defendant's device operates upon the same identical principle. We have seen above that it accomplishes the same results. The means for accomplishing these results are the same in both devices—a main gate; a bypass and a valve controlling the bypass and interconnecting means operating them inversely, the one with respect to the other, under the control of the speed sensitive element. The record is pointed out fully in our opening brief (pages 51 to 69), and the testimony of Prof. Cory (page 279), of Scattergood at Ans. 25, R. 162; defendant's expert Berry, R. 1040, Ans. 177; Scattergood, R. 166, Ans. 32 to 39; 163, Ans. 26. (See also R. 206 to 225 inclusive.)

The bypass is also to prevent an increased spouting velocity on the closing movement of the water wheel gate, and for the reason set forth in lines 1 to 35, page 1 of the patent in suit. This is proven in the defendant's devices by the testimony of Scattergood, appellee's witness (see pages 37 and 38 of our opening brief). Manifestly, defendant uses the bypass valves for all of the benefits accompanying governing by the Lyndon invention. Otherwise, why does defendant not discard it and to that extent avoid infringement?

Counsel insists (page 52) that the "bypass valve must have a movement inverse to that of the main nozzle in both directions at all times." This is a deliberate misstatement of facts as Lyndon claims that it must have an inverse movement in either direction and at no point did he use the words "both directions at all times."

Counsel's contention (page 53) that appellant's expert Prof. Cory admits that there is no true

equivalence; (referring to R. 443 and 444) is a direct misstatement of facts. Cory finds the mechanical equivalent of the result and operation but not the actual *physical* equivalent of the several parts, and his testimony here referred to is directed exclusively to elements of the claims 1 and 2 of the Lyndon patent, which are specific claims involving electrical and magnetic features in the specific governor structure of the drawings.

Counsel for appellee indulges in a large mass of verbiage as to the exact limit to which each of a large number of detail parts are to extend and the exact limits of the elements in the claims.

As an example of the utter weakness of such contentions note that he insists that lever 26 distinetly and alone is to be construed as the Lyndon controller. Page 1, line 66 of the Lyndon specification says "Fig. 6 illustrates in detail a part of my controlling device." By referring to Fig. 6, it is seen that the controlling device constitutes a large portion of the mechanism of the governor and includes with the lever 26 a great many other parts. We believe that in the structure of patent claims, it will be found that an element, almost invariably, consists of a number of parts associated together in some special and useful relationship and that these elements again are associated in some special relationship to form the completed combination. Such elements, for example, are the Lyndon controller; the main water wheel gate; the bypass and the connective means of the Lyndon claims. The mere fact that the elements are connected together in operative association, compels the conclusion that no line of demarcation can be drawn between them. The best that can be done in such a case is to draw a line across the connection between the elements, and it is a matter of opinion largely as to just where such line would be drawn between two connecting elements. The description of the device covered by any claim must be presumed to go to the full extent of covering the entire structure—that is, the sum of the elements of every claim must equal the complete structure covered by said claim.

As an instance of the futility of counsel's attempt to make something out of trivial inconsistencies, as to details of the Lyndon patent disclosure, we find him admitting in the middle of page 57, that the means for operating the water gate in either direction is the reversing gear and shafts 12 and 20 of the Lyndon patent. At the bottom of page 58, he takes issue with his own contentions in this respect.

As to counsel's reiterated citation of Judge Baker's decision in Eagle Sanitary & Cremation Co. v. City of Ellwood, 73 Fed. 484, we have already called attention to the later authority by the same able Judge in Reis v. Barth, 136 Fed., *supra*. This case merits careful reading.

Manifestly, defendant uses every element of the broad claims of the patent and it is immaterial at just what parts of the groups of elements of the patent in suit one group leaves off and another begins. For instance, the reversing gear 11 is on the same shaft 12, as the clutch disc 22 of the returning device. Is it proper to arbitrarily put the shaft 12

in either the returning device or the reversing clutch gear? Witnesses like Henry and Cory, mechanical experts, under captious cross examination, may honestly and genuinely vary in their testimony as to such things, without either of them being really wrong. No real conflict is produced and all the real groups of elements of the Lyndon broad claims are represented in the defendant's structures.

Our opening brief clearly points out by reference letters the elements of the broad claims in their location in the infringing device, on pages 55 to 57 inclusive.

Counsel cites the well-known "Nose of Wax" decision (page 73). Why, if counsel object so to distorting claims, should be attempt to distort the plain comprehensive meaning of the broad claims of the patent in suit?

Counsel's effort to show the lack of equivalence between the dynamo shown in the Lyndon specific structure and defendant's fly balls is an example of the efforts which he is making to mislead and to cloud the issue. The fly ball element with its associated parts in the defendant's structures is the speed sensitive element, and as such it is equivalent to the speed sensitive feature of the dynamo of the Lyndon specific device. The oil pump that supplies pressure fluid is driven from the same source of power in the defendant's device as is the dynamo in the Lyndon structure, and the pressure fluid is the equivalent of the electric fluid from the Lyndon dynamo; and both are for actuating the parts of the

respective mechanisms. In Lyndon we have the electrical circuits and the energy which they carry for moving the governor parts. In defendant's structures we have the pipes and oil circuits and the pressure oil which they carry for moving the governor parts. Electrical fluid in one instance and pressure fluid in the other. These fluid energy circuits of defendant are shown in the diagram of our opening brief, page 51, and the numbers attached to the circuits correspond with the numbers shown on the Lyndon circuits of the patent. The fluid pressure pump to the right of the diagram and the speed sensitive element, namely, the fly balls, correspond with the dynamo 8 of the Lyndon patent and the analogy is perfect, fluid energy derived from the water wheel shaft in both instances being used to shift the parts. The division of an element by defendant does not avoid infringement. A speed sensitive device in both instances sets into operation the parts to release the fluid energy through the proper channels. The principles of operation could not be more identical. troller of the Lyndon device which is set into operation by the speed sensitive mechanism, directs the flow of fluid energy in the proper channels to accomplish the desired movements. The line to line valve of the defendant's structure, is set into operation by the speed sensitive device of defendant and then directs the flow of fluid energy through the proper channels to cause the proper movements.

The movements caused are the shifting of the water wheel gate and the shifting of the bypass

valve (claims 6 and 7). This is the period of governing action of the water gate. (See Cobb, Ans. 817-820, R. 878.)

Lyndon employs weights and dash pots for the slow return movement of the bypass valve after governing; the defendant employs springs and a dash pot to effect the slow return of the bypass valve, after governing. In both cases this action takes place after the governing movement of the water gate operating means. (Claim 7.)

In our opening brief we have shown a diagram facing page 29 illustrating the principles of operation of the Lyndon invention and the infringing structures. In Lyndon we have a device for returning the controller to inoperative position after it has been acted upon by the speed sensitive element and before the governing has overrun. In the defendant's devices the returning element is acted upon by the speed sensitive element to return the controller to inoperative position before the governing has overrun. The principles of operation of the two structures are identical. The elements that we have here described are clearly set forth in claims 3 and 4. (See Cobb, Ans. 793, R. 873.)

The speed sensitive element in both structures is a rotating mass, being driven, in said rotation, from the water wheel shaft. The controlling element has a reciprocating part actuated by the speed sensitive element.

The power means for shifting the gates in each of the devices obtains its energy from the water wheel shaft, electrical energy in Lyndon's, and oil pressure or fluid energy in defendant's devices from the pump driven from the water wheel shaft. The energy in each case causes the movement of the gate valve either to open or to close, and also said mechanism through said energy, causes an inverse movement of the bypass valve through the connective means.

The main water wheel gate and the bypass in the Lyndon device, as well as in the infringing structures operate to open or close, or close or open, an outlet for water. The main water gate directs the proper quantity of water to flow onto the water wheel to generate electro-mechanical power and the bypass directs the proper water to discharge independently of the water wheel, to prevent inertia effects. The returning mechanism of Lyndon acts to return the controller to an inoperative position after its disturbance by the speed sensitive mechanism. The returning device of defendant acts to return the controller (line to line valve) to inoperative position after its disturbance by the speed sensitive or fly ball element. The action of this returning element cannot be described as elastic, in that elasticity does not involve the lapse in time. The returning element in both devices, Lyndon and the defendant, involve the time element—that is, the returning action on the controller element must lag slightly behind the original displacement of the controller; and after the lapse of an appreciable time, the controller is to be returned to an inoperative position. This lapse of time in the returning element is accomplished by Lyndon in the retarding

action (slipping period) of the clutch (see Prof. Durand, R. 2835), and in defendant's devices in the retarding action of the oil dash pots of the Lombard devices. It is believed that this is a perfect example of mechanical equivalence. It will be seen that we have shown above the identity of result, and that this is accomplished by substantially the same means in substantially the same way.

The record does not support appellee's contention (page 80) that Prof. Cory asserts that there is no equivalent of the controller in the infringing device. On the contrary, the reference shows that Prof. Cory did not find the *exact* equivalent of the entire circuit controller in a small part of one of the elements of defendant's devices, but he very clearly did find the mechanical equivalent in the defendant's device of all the elements in the Lyndon structure. (See R. 461-529, Q. 522; R. 2406, Q. 875.)

The degree to which appellant's counsel is willing to go in order to construct law to meet his needs, is clearly illustrated in his statement at the top of page 97, reading: "The specific means illustrated in the Lyndon drawings and described in his specification must be read into his claims in order to avoid the necessity of construing them as functional and void." If this be true, Lyndon would be entitled to claim but one single construction, and that in one claim, and it would be necessary for him under the interpretation of counsel to describe every single part in detail and its association with all other parts. If such contention be true there is not a valid claim

for a machine issued from the Patent Office to any inventor. The object of allowing a patentee more than one claim is, on the face of it, for the purpose of bringing within his invention and the patent, variations in structure, which accomplish the result by means equivalent to those disclosed by the inventor. See the authority at page 63 of our opening brief: "That each claim of a patent is a separate invention." The intent of the contract which the government makes with the inventor covers the length and breadth of his addition to the art as covered by his claim. We contend that the Lyndon invention is entitled to the length and breadth of the claims, is unanticipated and valid, and as proved by the evidence in this case, has gone into extensive use.

Counsel's allegation of impracticability of the Lyndon structure is presumably based upon the testimony of Cobb and Berry. We can find no other testimony in the record which could support any such assumption, and Cobb and Berry, it is to be noted, might readily consider any governing mechanism which they had not proved out in operation as impracticable. Their experience with the Bakersfield device was so disastrous as to fix "impracticability" in their minds. They are not equal to rising to the heights of the Lyndon invention. They knew what the art demanded. They tried to devise such a governor but they were not equal to the occasion.

On page 99, counsel contends that claimant has admitted that there is no bypass valve or its equiva-

lent in the infringing devices, by insisting that the plug cock valve of Bakersfield is the equivalent of Lyndon's Butterfly valve. Had Cobb or Berry substituted the Lyndon form of valve in the Bakersfield installation, they might have had a successful bypass valve. It was an old type of valve, but it had not been previously used in combination with a water gate actuated in a governor for bypassing water. Lyndon invented this combination.

Counsel (middle of page 79) states that Mr. Lyndon "nowhere in his specification" refers to solenoid 33 as simply the controller. It is manifestly an essential part of the controller and in lines 131 and 132, page 3 of the patent in suit, Mr. Lyndon does refer to it as the controlling solenoid 33 (see also Lyndon's patent, Fig. 6). Isn't it plain that this is an essential part of the controller and that the lever 26 merely operates conjointly with it, both parts entering into the controller, and as an element of the governor?

We recommend to Your Honors' reading Syl. 2 of the case cited at the top of page 81. This case is not in point for appellee, as the invention was a limited one, and is limited to certain specific structures and elements without any broad claims like those in the patent in suit. We have been unable to find the matter of the second paragraph on page 81 in either the case referred to above such matter or below such matter.

Again at the top of page 83 comes the misleading statement that the lever 26 is solely and completely

the "controller" of the claims, ignoring the controlling solenoid 33. All of these hair-splittings are immaterial, inasmuch as we have seen that the same groups of elements exist in both the Lyndon broad claims and the defendant's structures, with the same functions and giving the same results, as found in the last instance by Judge Trippet. If counsel wishes to truly present the question of the returning device, he should include reference to the testimony of Prof. Cory (page 2474, Q. 100, and Cobb, page 462).

Although counsel insists that infringement is not a mere matter of words, when we find parts in defendant's device to which the language of complainant's claims applies, both as to the kinds of parts and their functions and the results obtained. how can infringement fail to be found? Lyndon's combinations out of defendant's apparatus, and defendant's apparatus will remain a mere framework with no working parts. The Lyndon invention, as expressed in combination claims 3, 4, 6, 7 and 8, is the heart and substance and entirety of defendant's structures. In his extremity counsel's argument at the top of page 97 well nigh, if not entirely, denies appellant any application of the doctrine of equivalence. He would emasculate the real invention by reducing the board combinations to matters of solenoids, shafts, clutches, discs and the like, and break the contract between the United States and the patentee when claims 3, 4, 6, 7 and 8 were allowed to him.

Counsel's wretched illogic at the top of page 99,

would imply that there was a plug cock valve in defendant's device. There is no such thing. He then follows this up by attempting to reorganize the Bakersfield abandoned experiment, against the inhibitions of this Court in Stebler v. Riverside Heights, et al., 205 Fed. 735. Counsel's argument bottom of page 99, is answered by pointing out that merely connective means are to be modified in connection with the type of valves employed. This does not avoid infringement, as we have seen.

Counsel implies at the top of page 100 that Lyndon shows the plug cock valve. There is no such valve in Lyndon, as counsel well knows. The needle valve is a balanced valve as the record shows. We deal elsewhere with this question, of the Bakersfield failure, and the difference in the types of valves between Bakersfield and Lyndon.

The testimony of the witnesses of defendant in this case as to use of the Bakersfield device does not measure up to the kind of proof required by the Barbed Wire Patent case, 143 U.S., or as required by Your Honors in Parker v. Stebler, 177 Fed. R.

Clearly, the Bakersfield device, even if it were operative could have no relation in anticipation to claims 1, 2, 3, 4, 5, 7, 8 and 9 of the patent in suit, and defendant's use at least claims 3, 4, 6, 7 and 8.

The authorities of defendant (page 116) are all for us. We do not claim any "means" independently of other features, but only as connective parts of broad combinations of elements. As stated in our opening brief a claim solely for "means" for inversely operating valves, apart from the valves

themselves, would be merely a claim for a function and would not express a complete combination.

Counsel clearly resorts to untruth when he says (page 117), there is no means in defendant's device for returning the bypass valves to normal position.

Our opening brief points out the combination entities which are clearly to be construed within the principles put on paper by defendant's counsel and appearing in large type on page 21 of our opening brief.

We think we have demonstrated in the record that every effective governor for water wheels used in generating electricity uses one or more of the combinations of the Lyndon invention. This in reply to the observations on page 119.

Replying to the matter at the bottom of page 120 and page 121, it cannot be seen how counsel can make the assertions he does as to the means for returning defendant's bypass valve to normal or usual position. It only remains to be said that an impulse is given at all times to the bypass valve when the water gate valve is moved, and if the bypass valve is so set it will move responsive to this impulse and it will of necessity slowly return to usual position, as it does in the Lyndon invention

Counsel makes a crass and crude observation on page 122, in parenthesis, in the middle of the page, which we are sure will be beneath the notice of this Court. This comes as the climax of untruthful representation as to mechanics and effects produced, and is an attempt to drive home a bent nail with a headless hammer.

At the bottom of page 123, counsel asserts the rule which a defendant must follow in proving pricinvention. It is not the rule in carrying back the date of the invention of a patent in suit to prove the incipiency of such invention. The latter rule is the one complied with by appellant in this case in taking the testimony of Meyer, Reid, the younger Lyndon, the patentee Lyndon, and others as to which rule we have quoted at length herein, from Walker on Patents.

We find nothing to support the contention on page 100 of appellee's brief that the plug cock valve of the Bakersfield device and the Lyndon patent are known as "balanced valves," while the needle of defendant's device does not come within the description of a balanced valve. Cobb may have called the Bakersfield type of valve a balanced valve, but his subsequent experience with it and his report after its attempted operation proves conclusively that he was in error and that the valve was not what is called a balanced valve. (See the testimony of Cory, Dearth, Van Norden, Wilson, Henry, Cobb and Berry. See opening brief, pages 31 and 32.)

In the last paragraph on page 131, appellee's brief, he attempts to draw a sharp distinction between the clutch gear, etc., of Lyndon and the hydraulic cylinder of defendant's device. If the word "revolving" be cancelled from this paragraph, the analogy looms up perfectly between Lyndon and the defendant; a shaft to transmit motion or

perform all the functions necessary in this case may move endwise or only partly turn.

On page 150, appellee says, the tendency of the springs indicated by the letter "K" of complainant's chart is to "always close the auxiliary needle, and there is nothing to prevent it from doing this." The oil dash pot on the defendant's bypass needle shaft retards this closing movement, insuring the slow return claimed by Lyndon, and introducing the time element which he has removed from the water gate and taken care of in the bypass. During this slow closure of the auxiliary needle, after governing movement, there is a wastage of water and this wastage of water is to prevent the inertia effect in the pipe line—that is the object and function of the same parts in the Lyndon structure. Counsel contends that defendant's springs do not perform the same function as the Lyndon weights. Defendant's springs certainly return the bypass valve after a governing movement. Lyndon's weights certainly return the bypass valve after a governing movement. A flight of marvelous fancy is evidenced by counsel (page 152) commencing, "Defendant does not use such a bypass and does not regard the natural law forming the basis of Lyndon's alleged invention, for the reason that another natural law has neutralized the effect of the first, namely: the law of gravitation operating through a steep pipe line, increasing the velocity of the water has made it possible for defendant to disregard Lyndon's theory." That Lyndon fully understood this law of gravitation and its effect is clearly shown on

page 4 of his specification, lines 63 and 96 to 98. The entire reason for the Lyndon bypass valve is to introduce the time element necessary while gravity acts upon the column of water, and an adjustment to changed conditions takes place.

The law requires that a patentee set forth his invention in "claims." Claims are made up of words, not things and we are at a loss to understand how claims can be expressed other than in words, as counsel would indicate is necessary on the bottom of page 153.

Counsel would appear to believe that it is necessary for an inventor to describe in a claim, in the utmost detail, even more completely than in the average specifications, the device which would be covered, and would solely be covered, in the patent that might issue. This would entirely efface any question of protecting any breadth of invention and would limit the patentee to the specific structure—a limitation equal to or greater than that imposed in a design patent, which is manifestly at variance with the law, equity and common sense and is an absurdity in direct conflict with the ruling laid down in the 6th Circuit in National Tube Co. v. Mark, et al., 216 Fed. 507, by the Circuit Court of Appeals, (Syl.):

"Where a patent contains both a broad and a narrow claim the Court cannot construe into it a limitation not therein expressed, but which is expressed in the narrower claim and by which alone, one is distinguished from the other."

Counsel's attitude regarding the matter of proof

of incipiency conclusively proves that counsel does not know the law or wilfully misrepresents the law on this question. The testimony of our witnesses in this behalf is that of high grade men, it rings true and is conclusive proof. There is no basis in the record for the attack which counsel makes on these men (pages 124-125).

In connection with counsel's citation (page 126), there is to be borne in mind the decision of this Court in the companion case of Union Tool Co. v. Wilson, 249 Fed., R. 736.

Counsel makes a bald utterance of untruth at the bottom of page 127, when he says the litigation between appellant and the Pelton Water Wheel Co. involved anything else than the Lyndon patent. That litigation was a suit brought in the Northern District of California for infringement of the Lyndon patent in suit here and for nothing else.

Judge Trippet himself has found sufficient equivalence to support a finding of infringement, (R. 72), and the leading decision of the Supreme Court cited in our opening brief (page 53), with others, destroys all of counsel's arguments for non-equivalence in the case at bar.

All through counsel's brief there is evinced a fear to deal with the big issues of this case. Counsel never comes out in the open to meet these issues, we see him flit from cover to cover, throwing dust as he dodges, attempting to becloud rather than enlighten the issues. His strange and unfounded final arguments (page 147), and his lapsing again and

again into the errors he indulged in in Parker v. Automatic Machine Co., 227 Fed., supra, mark his efforts to obtain an affirmance of the decree of the lower court, as a mere side-show set up remote from the main tent. Appellee clearly uses the same groups of the same kinds of elements, operating in the same kind of manner to produce precisely the same results, as disclosed and claimed in the Lyndon patent. It requires no torturing of any of the doctrines to come to a finding of infringement in this The very findings of the trial judge go far enough to fully warrant the ultimate finding of infringement in this case. As we have observed, the Honorable Trial Judge was evidently withheld from such finding by failure to fully comprehend the fact that Lyndon's invention was something more than depicted in the drawing of his patent; he does not appear entirely swayed by that view, but he doubts whether the principles of the two things are the same. As he found that the results claimed for the Lyndon invention are obtained by defendant's devices, it would seem that by virtue of his further findings (pages 154-155), there could have been no possibility within law or logic of any other final finding than infringement; the patent being admittedly valid and unanticipated. The substance of the invention has been taken, as stated by Your Honors in Stebler v. Riverside Heights, et al., 205 Fed., R. 735, supra. As the lower court found, in effect, equivalence among the groups of elements of the machines, how could the total machines of appellee fail to infringe when they obtained the identical results of Lyndon, using the same principle of action?

These things were accomplished by groups of elements with connective parts, all claimed broadly in combinations, but not too broadly for the fundamental, pioneer and far reaching value and importance of the Lyndon invention. Evidently the trial Judge had not, at the time of this decision, grasped fully the application of the law to the interpretation of claims for broad inventions, either pioneer or quasi-pioneer. Lyndon taught the world big things and his assignee should reap the reward.

We urgently solicit that within equity and good conscience, upon the law and upon all the facts, a decree may run ordering the trial court to grant the relief prayed for in the Bill.

The facts and the law warrant reversal of the decree of the lower court.

Respectfully,

## RAYMOND IVES BLAKESLEE,

Solicitor and Counsel for Appellant.

## ADDENDUM.

In consulting Walker on Patents on the general question of mechanical equivalence, we must bear in mind that his views on this doctrine are narrow. They were not approved by the Supreme Court in

the Paper Bag case, 210 U. S., *supra*, in which *he was* counsel for the defeated party, and this question was paramount.

We wish to call Your Honors' attention to a few slight misprisions appearing in our opening brief. The word "Loomis" in line 9, page 18, should be "Loom Co." Line 17, page 22, "or" should be "for." The semi-colon in line 13, page 25, should come out and the word "Howe" in line 15 should be "15 Howard." The words "for defendant" should appear at the end of the line 10, page 52. In line 13, page 69, "243" should be "242."

Bo.